

PLUMBING SYMBOLS AND ABBREVIATIONS

(NOTE: NOT ALL SYMBOLS MAY BE REQUIRED FOR THIS PROJECT)

PLUMBING SYMBOLS

	SANITARY SEWER BELOW GRADE		COMPRESSED AIR
	ACID WASTE		FLOOR SINK
	SANITARY SEWER ABOVE GRADE AW = ACID WASTE		FLOOR DRAIN - FD
	STORM SEWER BELOW GRADE		AREA DRAIN - AD
	STORM SEWER ABOVE GRADE		ROOF DRAIN - RD, DOWNSPOUT - DS
	FOOTING OR UNDER FLOOR DRAIN TILE		WALL HYDRANT - WH
	CONDENSATE DRAIN LINE		YARD HYDRANT - YH
	CLEANOUT - CO		HOSE BIBB - HB
	PLUMBING VENT, V=VENT, VTR=VENT THRU ROOF, AV=ACID VENT		SHOWER - SH
	COLD WATER - CW		WATER HAMMER ARRESTOR
	HOT WATER - HW		VALVE BOX W/ VALVE UNDER GROUND
	HOT WATER CIRCULATING - HWC		SHUT OFF VALVE
	1/4" SLOPE PER FOOT ON ALL WASTE PIPE		
	SOFT WATER - HOT OR COLD AS INDICATED		
	TEMPERED WATER		
	SUMP PUMP DISCHARGE		
	FLOOR MOUNTED CLEANOUT		
	WALL MOUNTED CLEANOUT		
	HOT WATER RECIRCULATION SYSTEM BALANCING VALVE WITH CHECK VALVE		

SPECIAL PIPING

	WALL OUTLET
	MEDICAL OXYGEN
	MEDICAL VACUUM
	MEDICAL AIR
	DEMOLISH PIPE

	MEDICAL GAS PRESSURE SENSOR TIE TO ALARM PANEL
	VALVE BOX
	ALARM PANEL
	VACUUM BOTTLE SLIDE

MISCELLANEOUS

	POINT OF CONNECTION, NEW TO EXISTING		LIMIT OF DEMOLITION
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PLUMBING ABBREVIATIONS			
WC	WATER CLOSET	SH	SHOWER
UR	URINAL	ICEM	ICE MACHINE
LAV	LAVATORY	DW	FILTERED DRINKING WATER
SK	SINK	CW	COLD WATER
CS	CLINIC SINK	HW	HOT WATER
SS	SCRUB SINK	HWC	HOT WATER CIRCULATING
JS	JANITOR SINK	BFP	BACKFLOW PREVENTOR
FS	FLOOR SINK	RPZ	REDUCED PRESSURE ZONE BFP
FD	FLOOR DRAIN	VTR	VENT THROUGH ROOF
TD	TRENCH DRAIN	CRP	CORROSION RESISTANT PIPE
DF	DRINKING FOUNTAIN		
EWC	ELECTRIC WATER COOLER		

DEMOLITION GENERAL NOTES:

- ALL ABANDONED HVAC PIPING, DUCTWORK, WASTE & VENT, COLD AND HOT WATER PIPING ETC FOUND ABOVE THE CEILING IN THE DEMOLITION AREA SHALL BE REMOVED. THIS INCLUDES MATERIAL AND SYSTEMS CURRENTLY ACTIVE BUT RENDERED INOPERATIVE, OR NOT REUSED DURING THE DEMOLITION OF THIS PROJECT, AND ASSOCIATED VALVE, HANGERS, CONTROLS, AND SPECIALTIES.
- VERIFY EXACT SIZE AND LOCATION OF EXISTING UTILITIES BEFORE START OF DEMOLITION.
- RELOCATE, REMOVE, AND ADJUST MECHANICAL ITEMS AS REQUIRED TO COORDINATE WITH NEW WORK PLANS.
- ALL MECHANICAL ITEMS SHOWN ARE EXISTING AND SHOWN IN SCHEMATIC FORM ONLY.
- REMOVE EXISTING PIPING AND DUCTWORK AS REQUIRED BACK TO LAST ACTIVE SERVICE POINT. REMOVE ALL ABANDONED PIPING AND DUCTWORK THAT CONFLICTS WITH NEW WORK. COORDINATE WITH OWNER FOR REMOVAL OF CORRECT SYSTEMS.
- ALL DEMOLISHED FIXTURES AND EQUIPMENT SHALL BE REMOVED FROM PROPERTY.
- COORDINATE MECHANICAL DEMOLITION AND EQUIPMENT WITH PHASING PLANS, OTHER TRADES, AND SPECIFICATIONS NOTED ON ALL OTHER PLANS.
- IN AREAS WHERE EXISTING CONSTRUCTION IS REMOVED AND NO ADDITIONAL CONSTRUCTION IS INDICATED, PATCH AFFECTED AREA TO MATCH ADJACENT CONSTRUCTION.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL OTHER EQUIPMENT.
- COORDINATE ANY SHUTDOWNS OF SERVICES OR EQUIPMENT WITH OWNER TO MINIMIZE INTERFERENCE WITH OWNER'S OPERATION AND DOWNTIME OF NEW AND EXISTING SERVICES. CONTRACTOR SHALL SUBMIT TO OWNER FOR REVIEW AND APPROVAL THE PROPOSED PHASING PLAN FOR CONNECTING NEW SERVICES TO EXISTING SERVICES.
- CONTRACTOR SHALL COMPLY WITH GENERAL CONDITIONS AND PROTECTION PROVISIONS SPECIFIED FOR JOINT OWNER / CONTRACTOR OCCUPANCY WORK AREAS.
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS ABOVE CEILING BEFORE BEGINNING WORK. CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND OTHER EXISTING FACILITY CONDITIONS FROM DAMAGE DURING CONSTRUCTION. ANY EXISTING UTILITIES AND SERVICES DAMAGED SHALL BE REPAIRED AT NO EXPENSE TO THE OWNER. CONTRACTOR SHALL TEMPORARILY MOVE OR TAKE OUT OF SERVICE ANY UTILITY NECESSARY TO COMPLETE WORK. SUCH SERVICES SHALL BE REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
- -- DESIGNATION OF MECHANICAL, PLUMBING AND FIRE PROTECTION EXISTING MATERIALS TO BE REMOVED.
- -- DESIGNATION OF MECHANICAL, PLUMBING AND FIRE PROTECTION EXISTING MATERIALS TO REMAIN.
- INDICATES LIMIT OF DEMOLITION

PLUMBING GENERAL NOTES:

- VERIFY EXACT SIZE AND LOCATION OF EXISTING UTILITIES BEFORE START OF CONSTRUCTION.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF ALL EQUIPMENT AND FIXTURES.
- PIPING IS SHOWN IN SCHEMATIC FORM. ROUTE PIPING AS REQUIRED FOR CLEARANCE WITH STRUCTURAL CONDITIONS AND OTHER BUILDING SYSTEMS. COORDINATE WITH OTHER TRADES AS REQUIRED. DO NOT SCALE DRAWINGS. DRAWINGS ARE NOT INTENDED TO BE USED AS CONTRACTOR SHOP DRAWINGS. PROVIDE ALL REQUIRED FITTINGS TO OFFSET ANY OBSTACLES.
- COORDINATE ANY SERVICE OR EQUIPMENT SHUTDOWNS WITH OWNER TO MINIMIZE INTERFERENCE WITH OWNER'S OPERATION AND DOWNTIME OF NEW AND EXISTING SERVICES. CONTRACTOR SHALL SUBMIT TO OWNER FOR REVIEW AND APPROVAL THE PROPOSED PHASING PLAN FOR CONNECTING NEW SERVICES TO EXISTING SERVICES.
- ROUGH-IN AND CONNECT ALL PLUMBING REQUIRED TO EQUIPMENT FURNISHED AND INSTALLED BY OTHER DIVISIONS. WATER SUPPLY DROPS AND MEDICAL GAS DROPS IN WALLS TO FIXTURE GROUPS SHALL BE EXTENDED HORIZONTALLY TO SERVE EACH FIXTURE AS NEEDED.
- PIPING THROUGH ALL FIRE OR SMOKE RATED FLOORS, ROOFS, WALLS, AND PARTITIONS SHALL BE PROVIDED WITH FIRE STOPPING. SPACE BETWEEN WALLS/FLOORS AND PIPING SHALL BE SEALED WITH FIRE BARRIER MATERIAL EQUIVALENT TO RATING OF WALL/FLOOR.
- ALL VALVES IN CORRIDORS SHALL BE LOCATED 1'-0" AWAY FROM WALLS UNLESS OTHERWISE NOTED. VALVES SHALL NOT BE LOCATED OVER INACCESSIBLE CEILINGS.
- FURNISH AND INSTALL SHUTOFF VALVES IN ALL DOMESTIC WATER BRANCH PIPING OFF OF THE MAINS AND IN ALL OTHER BRANCH PIPING SERVING FOUR OR MORE PLUMBING FIXTURES AS SHOWN ON PLANS.
- INDICATES CONNECT NEW TO EXISTING.
- REFER TO ARCHITECTURAL EQUIPMENT PLANS FOR EXACT LOCATIONS OF MEDICAL GAS VALVE BOXES AND GAS OUTLETS.
- INSTALL ALL SANITARY WASTE AND STORM DRAINAGE PIPING AT 1/2" / FT.
- ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
- ALL CEILING MOUNTED ITEMS BETWEEN GRIDLINES "2" AND "5", AND FROM "CC" TO 32 FT EAST OF "CC", SHALL BE RIGIDLY SUPPORTED TO MINIMIZE MOTION DURING FUTURE MRI OPERATION. HANGERS SHALL BE FABRICATED FROM MATERIALS SUCH AS UNISTRUT. HANGERS SHALL BE BRACED TO PREVENT RACKING. FERROUS DUCT AND PIPE SHALL BE RIGIDLY FASTENED TO HANGER FRAME AND THERMALLY BROKEN. NON-FERROUS DUCT, PIPE, AND HANGERS MAY BE USED INSTEAD OF RIGID SUPPORTS. FERROUS LOOSE HANGER SYSTEMS SUCH AS HANGER STRAP AND ALL-THREAD ROD ARE PROHIBITED.
- NO DUCT OR PIPE SHALL BE FABRICATED OR INSTALLED UNTIL SHOP DRAWINGS ARE COORDINATED WITH ALL OTHER TRADES AND APPROVED BY OWNER AND ENGINEER. THE QUALITY OF WORKMANSHIP REQUIRED FOR ALL WORK SHALL BE OF THE HIGHEST OBTAINABLE. WORKING WITH THE MATERIALS SPECIFIED, WORKMANSHIP SHALL BE SATISFACTORY TO THE OWNER AND ENGINEER, AND THEIR DECISION AS TO ACCEPTABLE QUALITY IS FINAL. IF WORKMANSHIP IS DETERMINED TO BE UNSATISFACTORY FOR ANY REASON, OR INSTALLED PRODUCTS DO NOT MEET DESIGN INTENT, THEN CONTRACTOR SHALL REPLACE UNSATISFACTORY MATERIALS WITH NO ADDITIONAL CHARGE TO OWNER.
- ALL WORK PERFORMED IN THE CEILING OF ACTIVE VA PERSONS WORK AREA MUST BE COORDINATED WITH THE VA PROJECT MANAGER AND VA WORK AREA TENANT. WORK IN THESE AREAS SHALL BE PERFORMED AND COMPLETED DURING THE TIME PERIODS OUTSIDE THE NORMAL VA WORK DAY FOR EACH AREA, (EVENINGS AND WEEKENDS).
- REFER TO SHEET 1-A8 FOR LIST OF DEDUCT ALTERNATES.

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project number
11-25503

Drawing Title
**PLUMBING NOTES,SYMBOLS
AND ABBREVIATIONS**

CONSTRUCTION DOCUMENTS

Project Title
**EXPAND BLDG. 1 FOR PACT
AMBULATORY CARE & RADIOLOGY**

Building No.
BLDG 1

Checked
AGW

Drawn
DRB

Location
ICVA HEALTH CARE SYSTEM

Date
12/15/2014

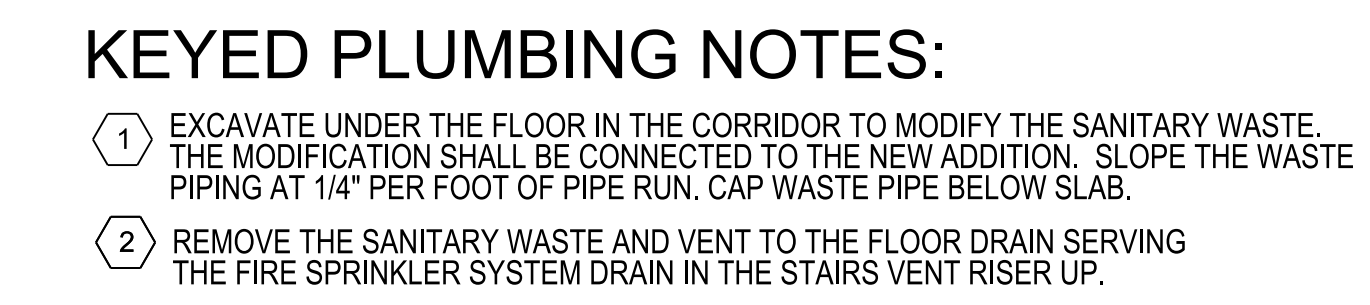
Project No.
636-201

DRAWING NO.
1-P1



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HEERY

design

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project number
11-25503

Drawing Title
PLUMBING DEMOLITION PLAN
BELOW GRADE - LOWER LEVEL

CONSTRUCTION DOCUMENTS

Building No.
BLDG 1

Checked
AGW

Drawn
DRB

Location
ICVA HEALTH CARE SYSTEM

Project Title
EXPAND BLDG. 1 FOR PACT
AMBULATORY CARE & RADIOLOGY

DRAWING NO.
1-P2

Date
12/15/2014

Project No.
636-201

Office of Facilities

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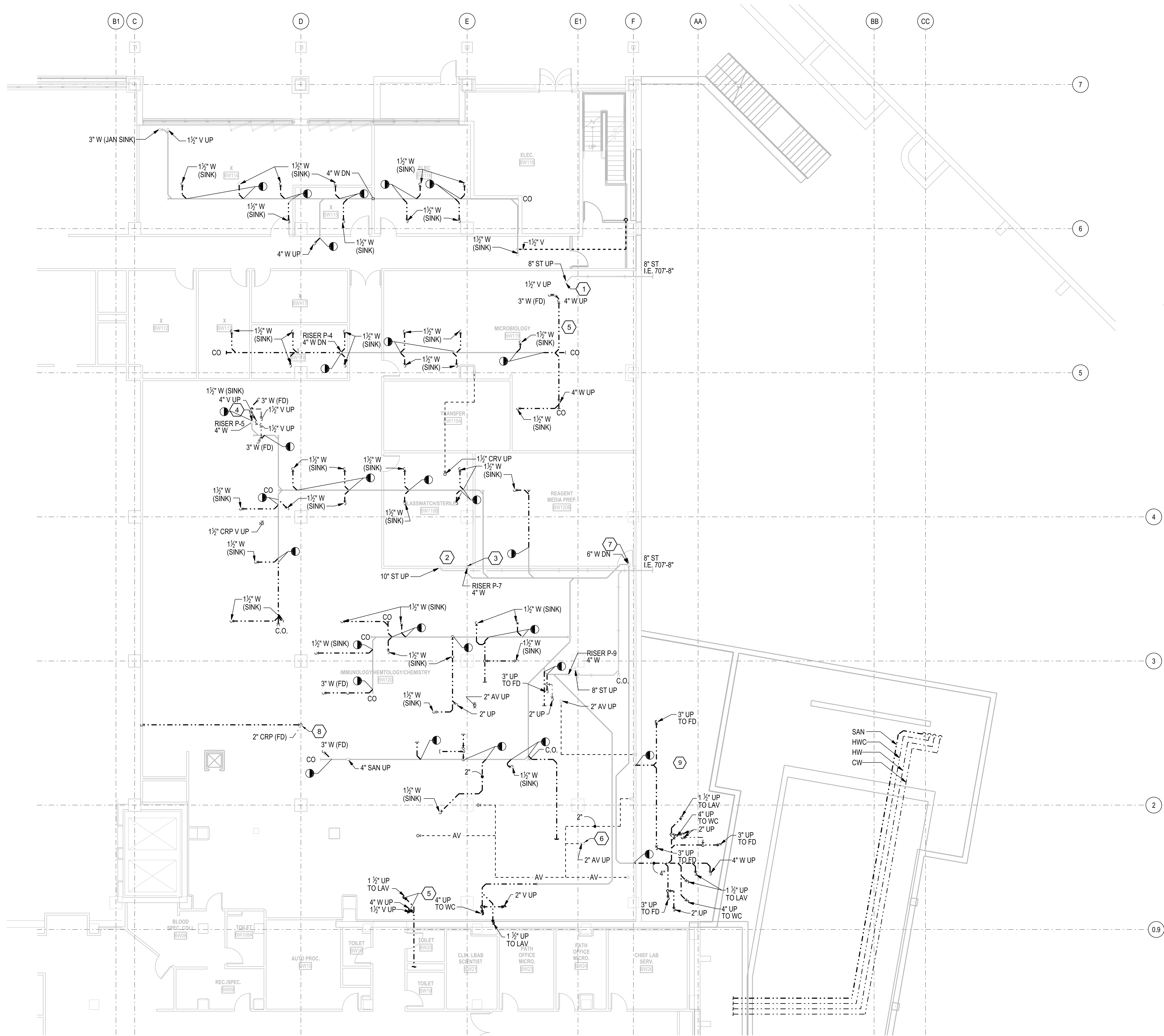
INITIALS

GENERAL PLUMBING NOTES:

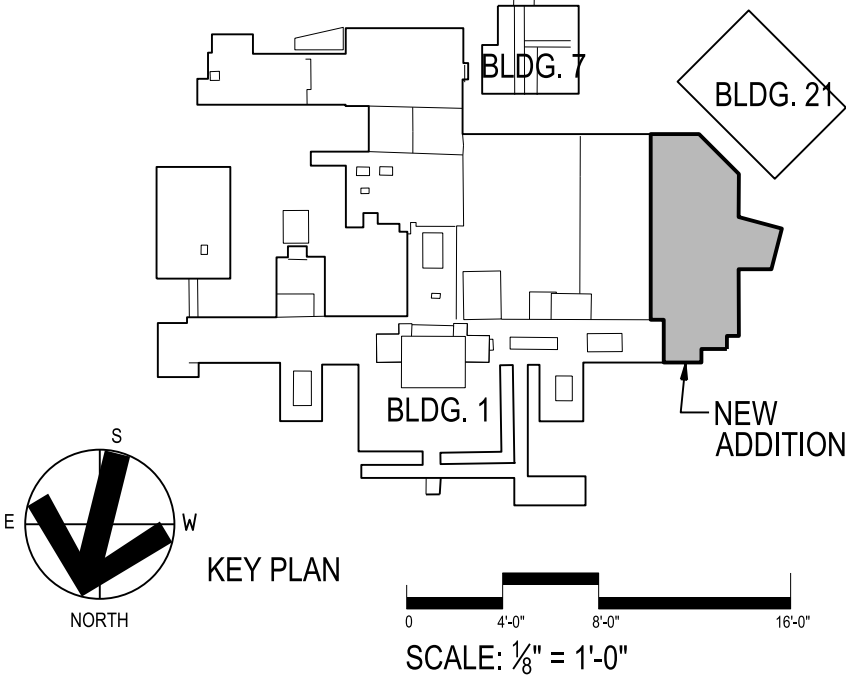
- A. REMOVE ALL FITTINGS AND PIPING NOT BEING REUSED.
- B. ALL WORK PERFORMED IN THE CEILING OF ACTIVE VA PERSONS WORK AREA MUST BE COORDINATED WITH THE VA PROJECT MANAGER AND VA WORK AREA TENANT. WORK IN THESE AREAS SHALL BE PERFORMED AND COMPLETED DURING THE TIME PERIODS OUTSIDE THE NORMAL VA WORK DAY FOR EACH AREA, (EVENINGS AND WEEKENDS).
- C. SEE SHEET 1-P6 FOR NEW PLUMBING WASTE, VENT AND STORM FOR CONNECTIONS TO NEW PLUMBING FIXTURES ON LEVEL 1.
- D. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER, PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED, PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
- E. GENERAL CONTRACTOR TO PATCH ALL FLOOR AND WALL PENETRATION HOLES REMAINING AFTER DEMOLITION OF ALL PIPING, CONDUITS, AND DUCTWORK.
- F. REFER TO SHEET 1-A8 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.

KEYED DEMO NOTES:

- 1 OFFSET THE 8" STORM RISER TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 2 OFFSET THE 10" STORM RISER TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 3 OFFSET THE 4" WASTE RISER P-7 TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 4 OFFSET THE 4" WASTE RISER P-5 AND 4" VENT RISER TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 5 OFFSET THE 4" WASTE RISER AND 1 1/2" V RISER TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 6 OFFSET THE 2" ACID VENT PIPE TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 7 CONNECT TO NEW WASTE PIPING FOR LEVEL 1 THRU 4 OF THE ADDITION TO THE EXISTING 6" W RISER.
- 8 OFFSET THE 2" ACID VENT PIPE TO NEW LOCATION AS SHOWN ON SHEET 1-P6.
- 9 DEMOLISH ALL PLUMBING FOR REMOVED BUILDING. CAP ALL AFFECTED CONNECTIONS ON OTHER SIDE OF GRID LINE F.



1 ZONE A
1/4" = 1'-0"



Revisions	Date	Revisions	Date	Revisions	Date

VA FORM 08-6230, FEB. 1983

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project number
11-25503

Drawing Title PLUMBING DEMOLITION PLAN ABOVE GRADE- LOWER LEVEL
CONSTRUCTION DOCUMENTS

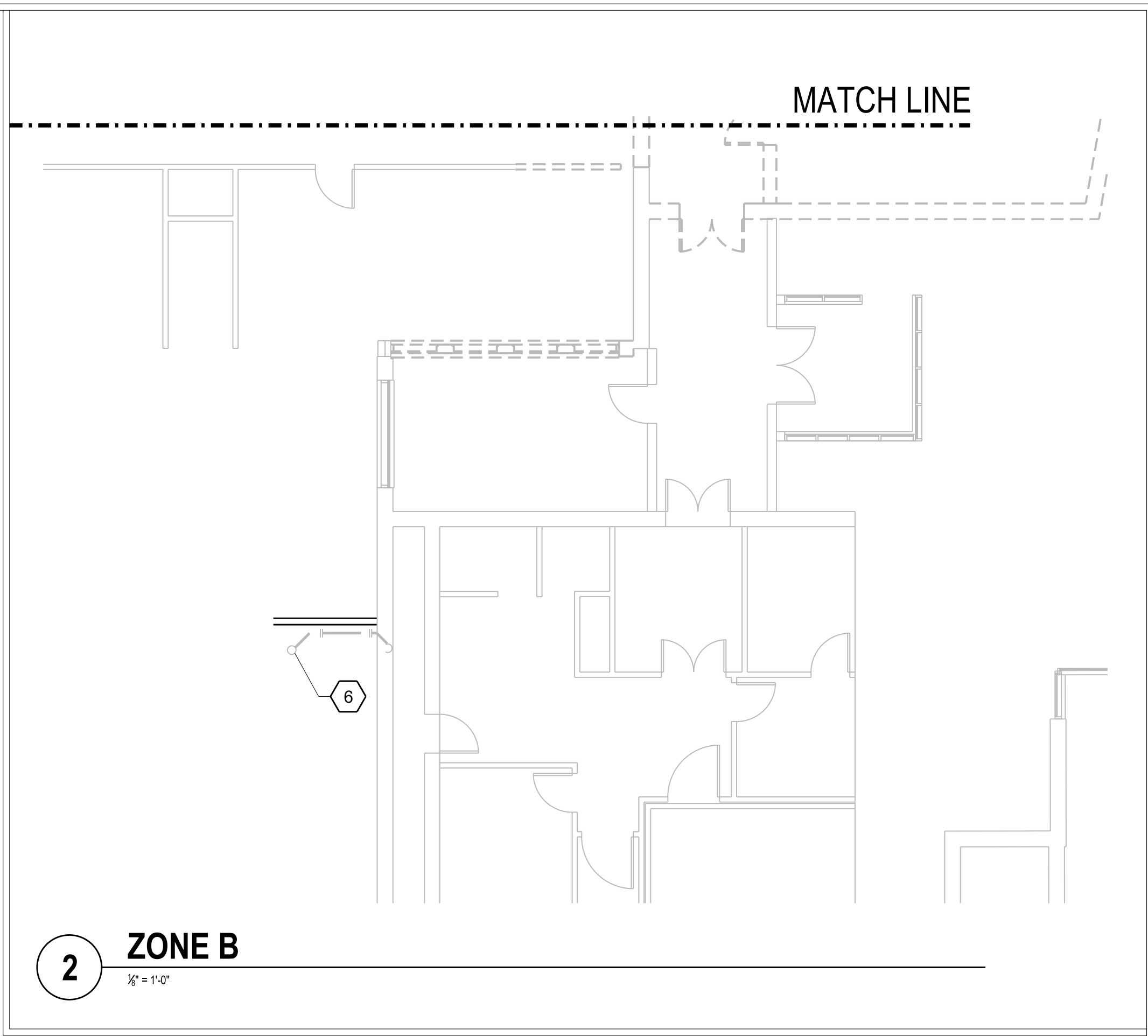
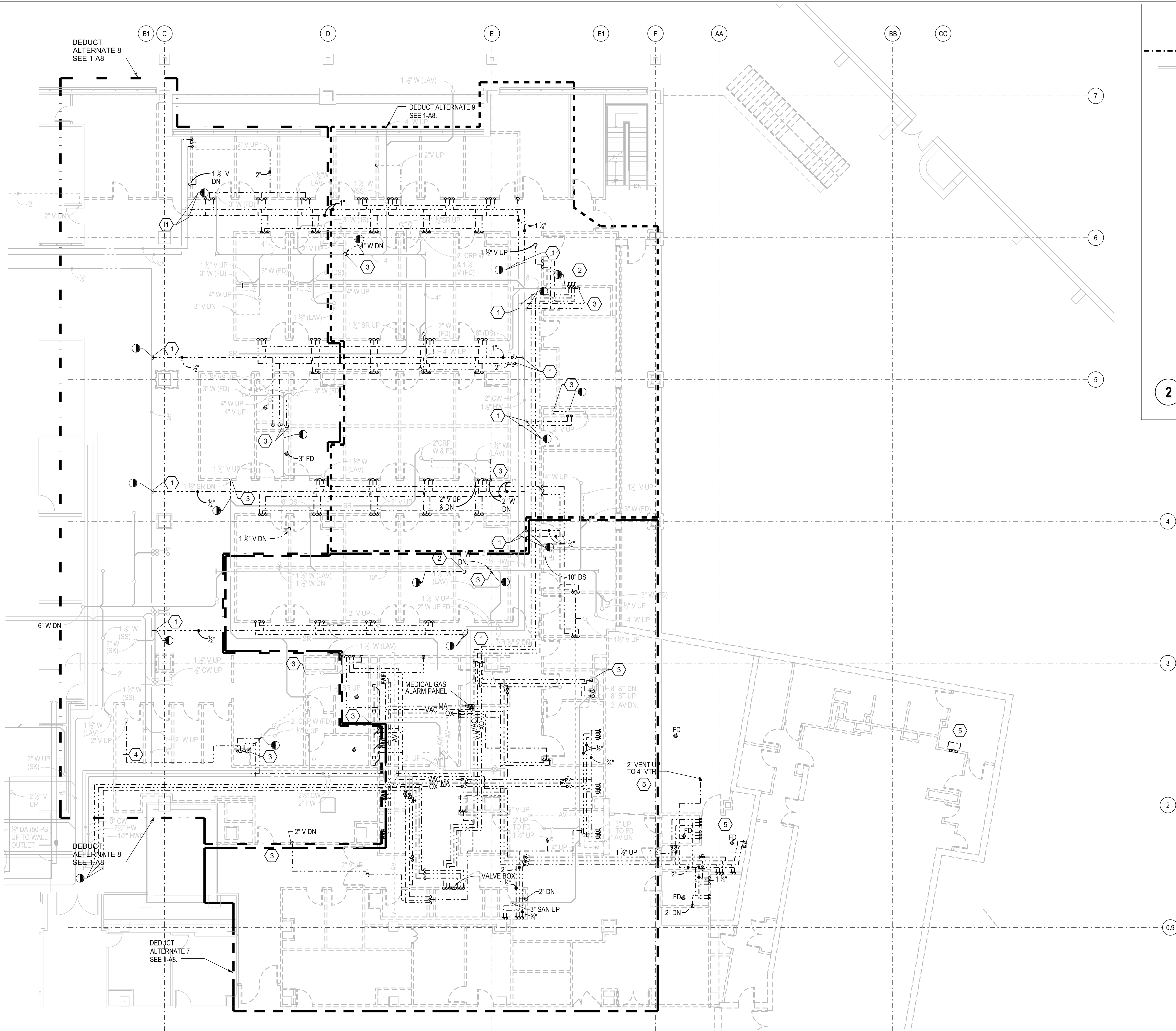
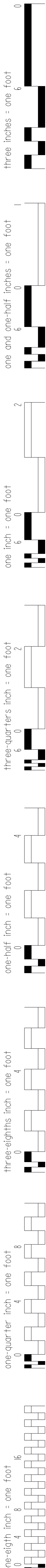
Project Title EXPAND BLDG. 1 FOR PACT AMBULATORY CARE & RADIOLOGY
Building No. BLDG 1
Location ICVA HEALTH CARE SYSTEM

Date 12/15/2014
Project No. 636-201
DRAWING NO. 1-P3



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Veterans Affairs

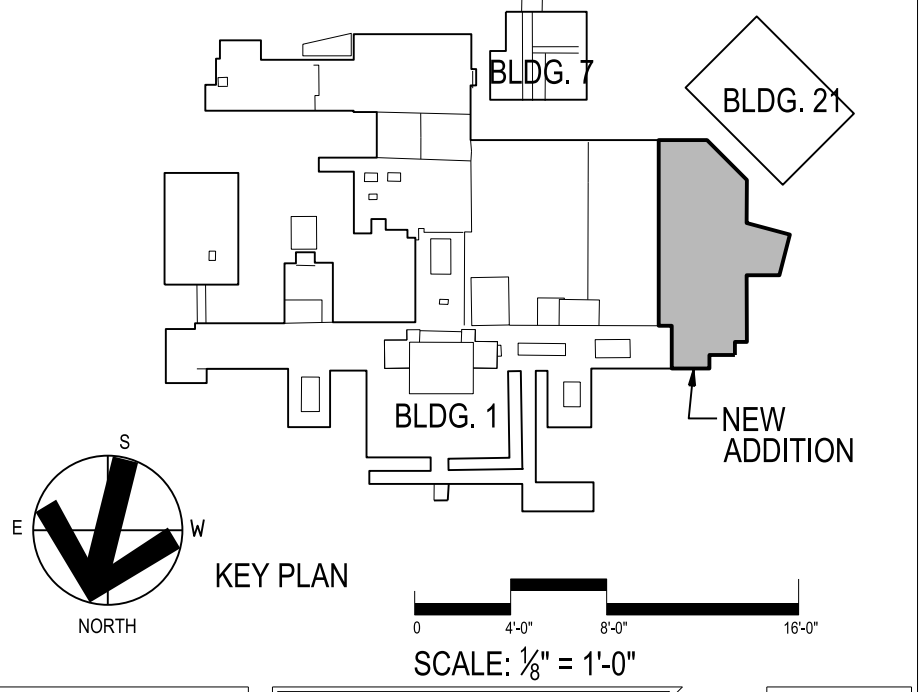
PROJECT: ICVA-VAHC-EXPAND BLDG. 1 FOR PACT PROJECT
SHEET TITLE: P-VA-022050D-CADD-1-P4-102050D-1-02-01
PLOT DATE: 02/20/2014
PLOT BY: JCH/BJC/OT/Heery Engen



- GENERAL PLUMBING NOTES:**
- A. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
 - B. RELOCATE ALL EXISTING TO REMAIN STORM, SANITARY, AND VENT RISERS INTO NEAREST NEW WALL AND RECONNECT TO MAIN ABOVE CEILING OF THIS LEVEL AND LOWER LEVEL. INCLUDE ALLOWANCE FOR RELOCATING SEVERAL RISERS NOT SHOWN; TO BE FOUND AFTER WALL DEMOLITION.
 - C. GENERAL CONTRACTOR TO PATCH ALL FLOOR AND WALL PENETRATION HOLES REMAINING AFTER DEMOLITION OF ALL PIPING, CONDUITS, AND DUCTWORK.
 - D. REFER TO SHEET 1-A8 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.

- KEYED DEMO NOTES:**
- 1 CAP DOMESTIC WATER LINES AT THE MAIN WHERE PIPING IS REMOVE AND NOT REUSED.
 - 2 RELOCATE STORM PIPE THROUGH FLOOR TO ACCOMMODATE NEW FLOOR PLAN.
 - 3 RELOCATE WASTE AND VENT PIPE THROUGH FLOOR TO ACCOMMODATE NEW FLOOR PLAN.
 - 4 CAP OX, MA AND VAC PIPING DURING THE PHASE FOR DEMOLITION OF THE EMERGENCY DEPARTMENT THIS WORK WILL REQUIRE SYSTEM SHUT DOWNS AND WORK PERIOD OUTSIDE THE VA'S NORMAL OPERATING HOURS.
 - 5 DEMOLISH ALL PLUMBING FIXTURES AND ASSOCIATED PIPING FOR REMOVED BUILDING.
 - 6 DEMOLISH AREA DRAIN.

1 ZONE A
1/2" = 1'-0"



Revisions	Date	Revisions	Date	Revisions	Date

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project number
11-25503

Drawing Title PLUMBING DEMOLITION PLAN LEVEL 1
CONSTRUCTION DOCUMENTS

Project Title		
EXPAND BLDG. 1 FOR PACT AMBULATORY CARE & RADIOLOGY		
Building No.	Checked	Drawn
BLDG 1	AGW	DRB
Location		
ICVA HEALTH CARE SYSTEM		

Date 12/15/2014
Project No. 636-201
DRAWING NO. 1-P4

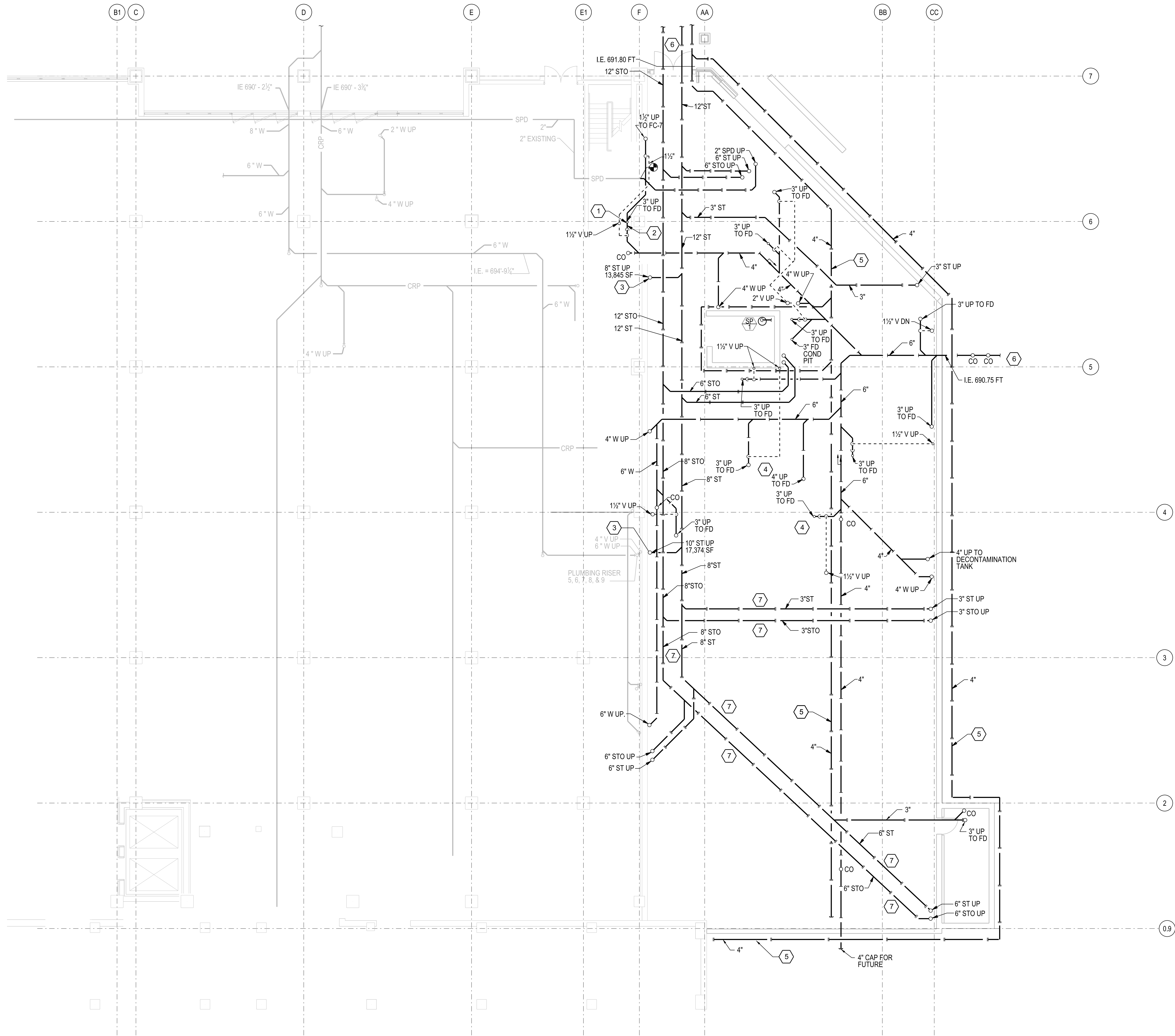


GENERAL PLUMBING NOTES:

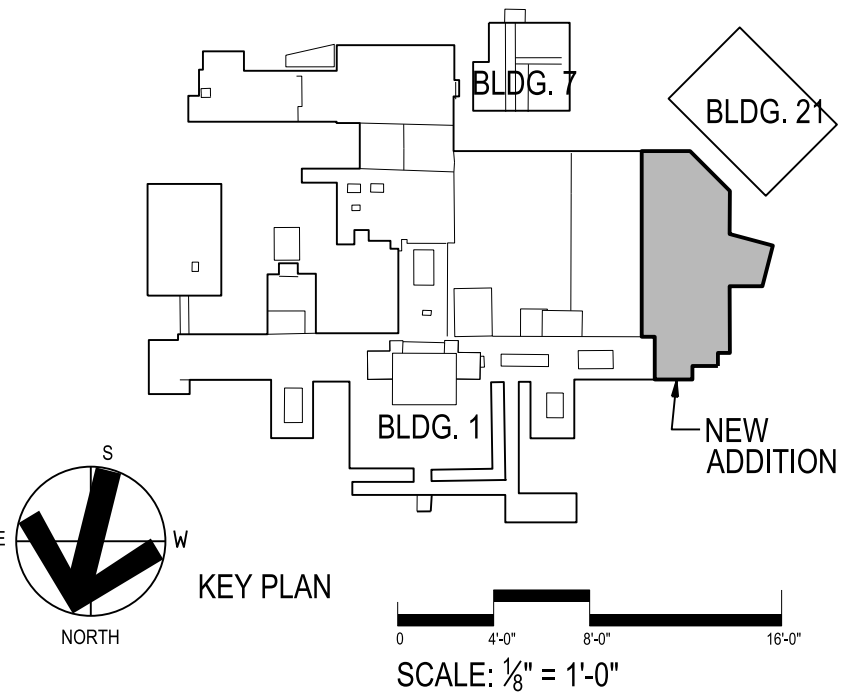
- A. ALL UNDER SLAB PIPING SHALL BE INSTALLED AT 1/4" PER FOOT FALL.
- B. ALL UNDER SLAB WASTE PIPING WORK SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORKING AREA IN THE HOSPITAL. SEPARATION PARTITION SHALL BE MADE OF STUDS AND GYPSUM BOARD TAPED AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
- C. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
- D. GENERAL CONTRACTOR TO SLOPE FLOORS TO WARDS FLOOR DRAINS. COORDINATE WITH ARCHITECT AND OWNER FOR APPROVED SLOPE REQUIRED.
- E. ALL PIPING THROUGH FLOORS TO HAVE CORE DRILLED PENETRATIONS AND PROVIDED WITH FIRE STOPPING SLEEVES.
- F. REFER TO SHEET 1-A68 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.

KEYED PLUMBING NOTES:

- 1 3" FLOOR DRAIN FOR SPRINKLER DRAINAGE.
- 2 EXCAVATE UNDER THE FLOOR OF THE CORRIDOR TO CONNECT WITH THE NEW WASTE PIPING. REPLACE WITH NEW FLOOR TO MATCH THE EXISTING MATERIAL AND FLOOR ELEVATION BY GENERAL CONTRACTOR.
- 3 CONNECT TO THE EXISTING STORM DRAIN PIPE FROM THE CLINIC ADDITION AND TURN DOWN INTO THE FLOOR FOR CONNECTION TO THE NEW STORM PIPING UNDER THE BASEMENT FLOOR SLAB.
- 4 COORDINATE THE LOCATION OF THE FLOOR DRAIN WITH THE COIL CONDENSATE DRAIN LOCATIONS AND COIL DRAIN VALVES.
- 5 PERFORATED PVC DRAINAGE TILE WITH SEDIMENT & DRAINAGE CLOTH. INSTALL AT 1/8" PER FOOT FALL. CONNECT TO SITE STORM MAIN.
- 6 SEE SITE UTILITY PLAN FOR CONTINUATION.
- 7 INSTALL THIS SECTION OF FARTHEST STORM PIPING AT 1/8" PER FOOT FALL AS NEEDED TO ENSURE PROPER DISCHARGE INVERTED ELEVATION.



1 ZONE A
1/8"=1'-0"



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project number
11-25503

Drawing Title
**PLUMBING PLAN-
BELOW GRADE - LOWER LEVEL**

CONSTRUCTION DOCUMENTS

Project Title
**EXPAND BLDG. 1 FOR PACT
AMBULATORY CARE & RADIOLOGY**

Building No.
BLDG 1

Location
ICVA HEALTH CARE SYSTEM

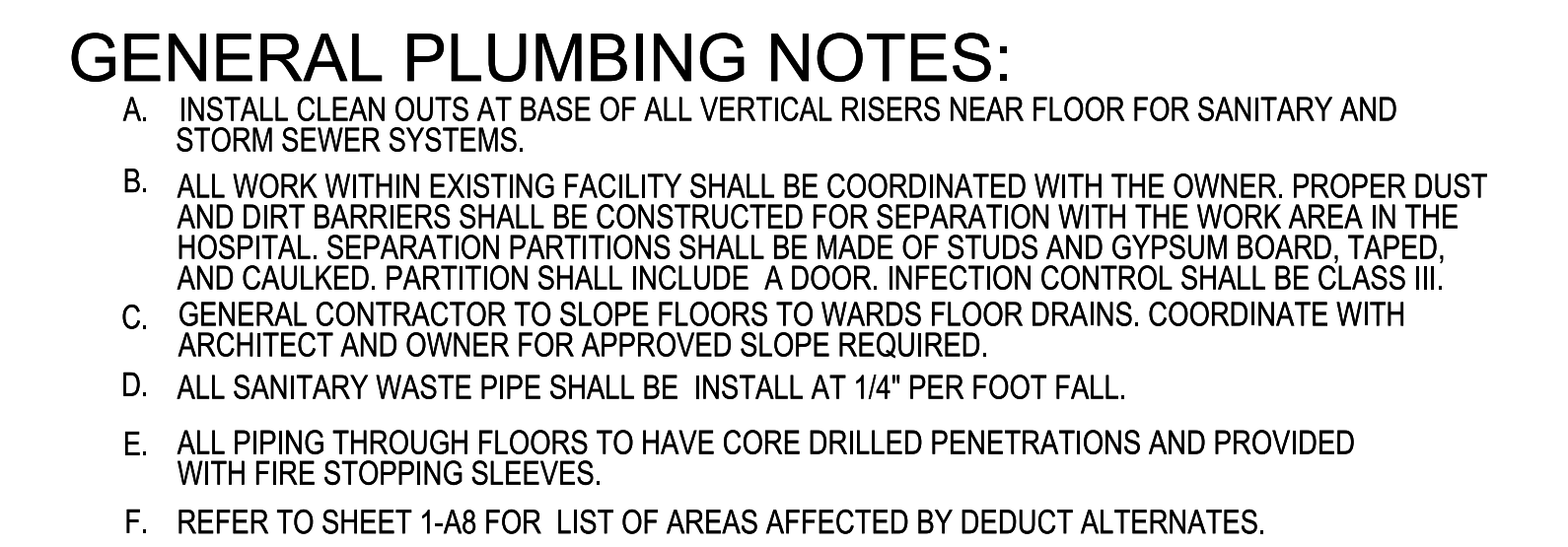
Date
12/15/2014

Project No.
636-201

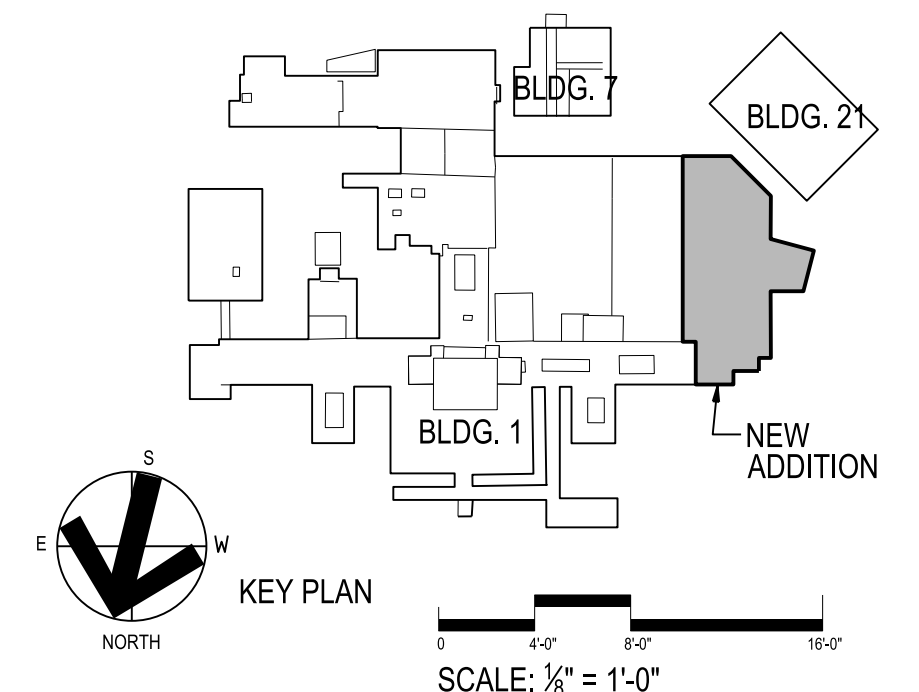
DRAWING NO.
1-P5



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1	DECONTAMINATION STORAGE TANK. SEE DETAIL 9 ON SHEET 1-P12.
2	CAP ENDS OF DEMOLISHED PIPE TERMINATIONS. REMOVE ANY UNUSED EXCESS PIPING.
3	DECONTAMINATION MANUAL VALVE BELOW GRADE. ACCESSIBLE VALVE BOX COVER.



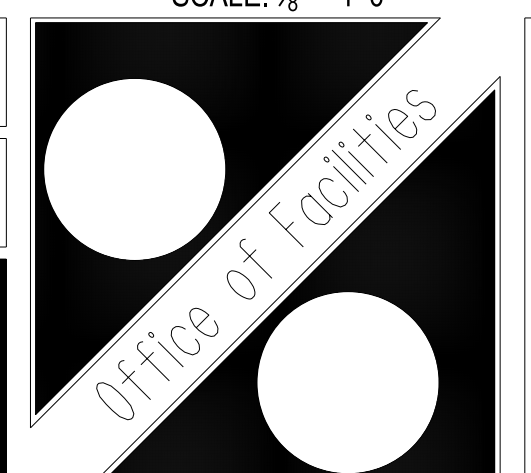
HEERY design

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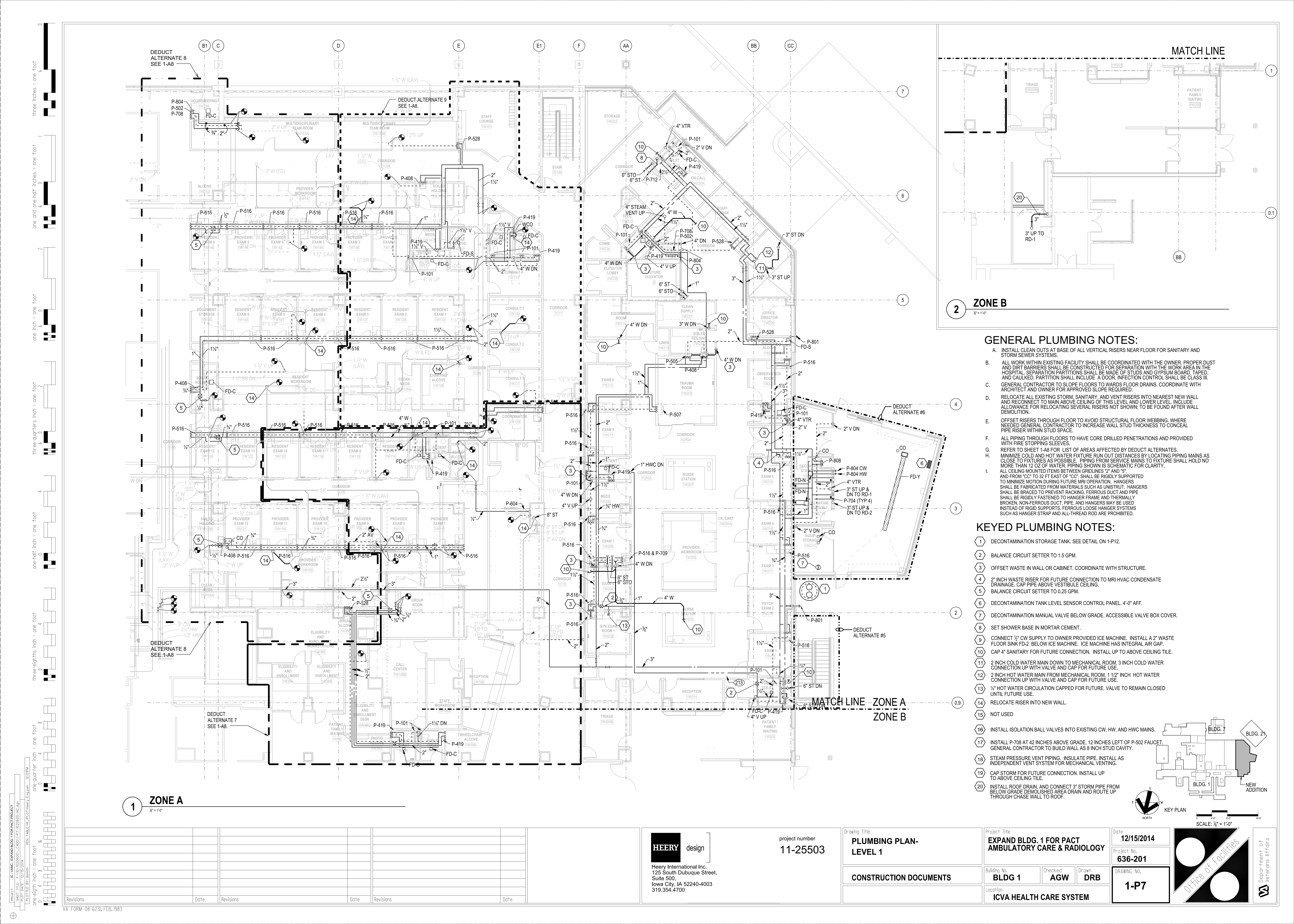
Drawing Title	<p>PLUMBING PLAN- LOWER LEVEL</p>
<p>CONSTRUCTION DOCUMENTS</p>	

Project Title	EXPAND BLDG. 1 FOR PACT AMBULATORY CARE & RADIOLOGY		
Building No.	Checked	Drawn	
BLDG 1	AGW	DRB	
Location	ICVA HEALTH CARE SYSTEM		

Date	12/15/2014
Project No.	636-201
DRAWING NO.	1-P6



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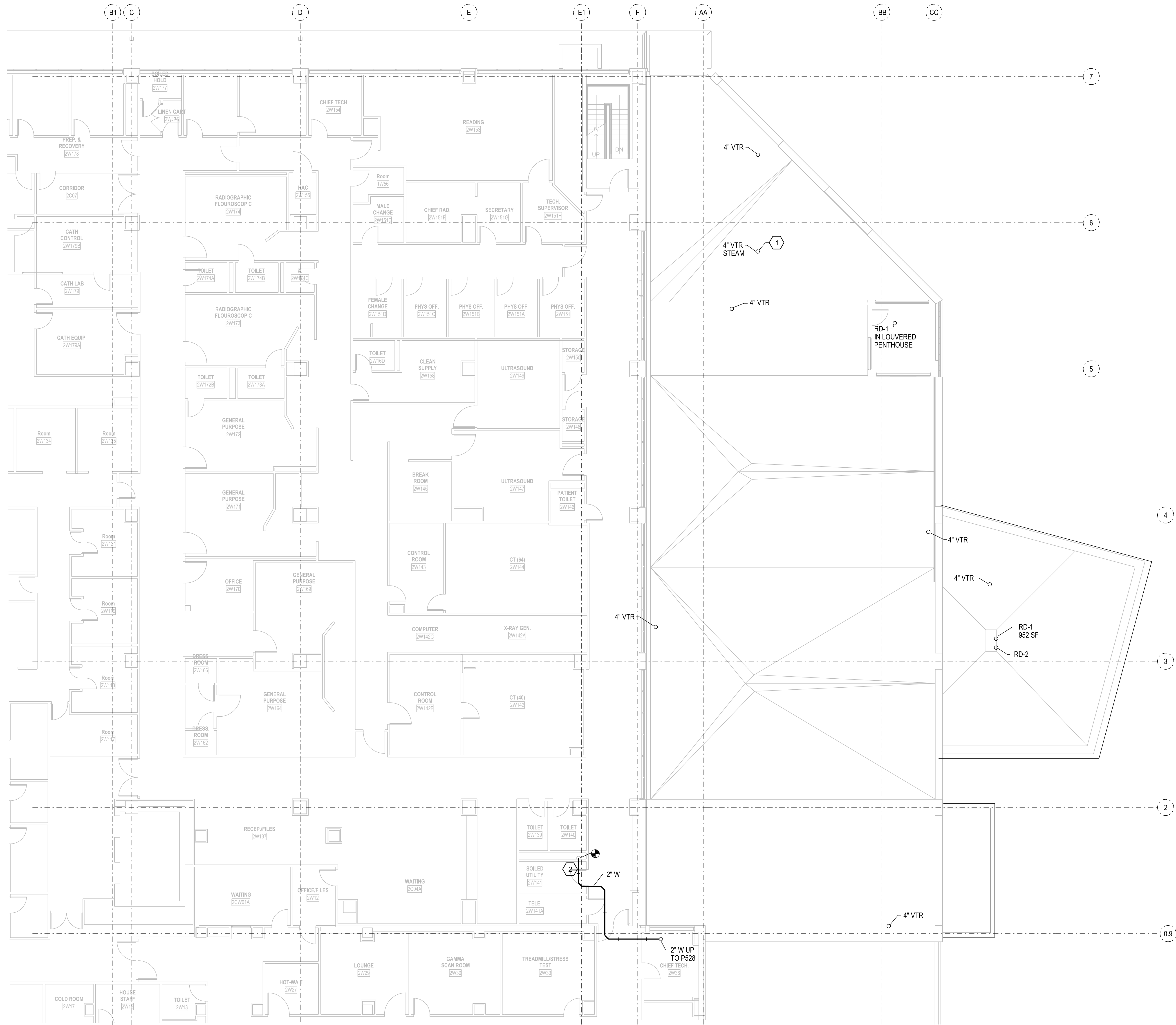


GENERAL PLUMBING NOTES:

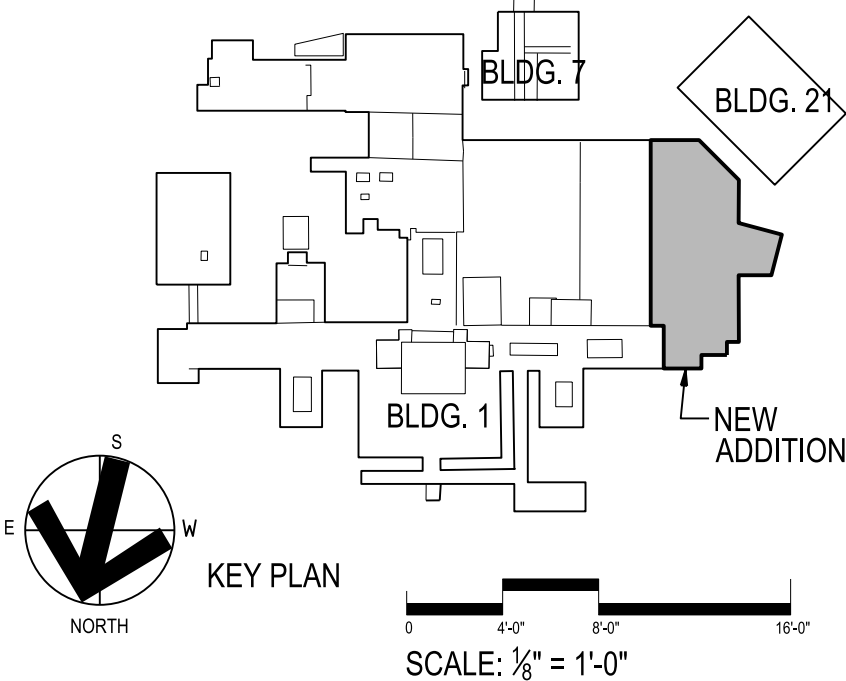
- A. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III. ARCHITECT AND OWNER FOR APPROVED SLOPE REQUIRED.
- B. GENERAL CONTRACTOR TO SLOPE FLOORS TO WARDS FLOOR DRAINS. COORDINATE WITH ARCHITECT AND OWNER FOR APPROVED SLOPE REQUIRED.
- C. ALL PIPING THROUGH FLOORS TO HAVE CORE DRILLED PENETRATIONS AND PROVIDED WITH FIRE STOPPING SLEEVES.
- D. REFER TO SHEET 1-A8 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.
- E. ALL VENTS TO MAINTAIN 25 FEET DISTANCES FROM AIR INTAKE LOUVERS.

KEYED PLUMBING NOTES:

- 1 STEAM PRESSURE VENT PIPING. INSULATE PIPE, JACKET PIPE WITH LAGGING. INSTALL AS INDEPENDENT VENT SYSTEM FOR MECHANICAL VENTING. TERMINATE WITH GOOSENECK DOWN AT 2' ABOVE ROOF.
- 2 GENERAL CONTRACTOR TO PATCH AND REPAIR WALL.



1 ZONE A
1/8"=1'-0"



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project number
11-25503

Drawing Title
**PLUMBING PLAN-
LEVEL 2**

CONSTRUCTION DOCUMENTS

Project Title
**EXPAND BLDG. 1 FOR PACT
AMBULATORY CARE & RADIOLOGY**

Building No.
BLDG. 1

Checked
AGW

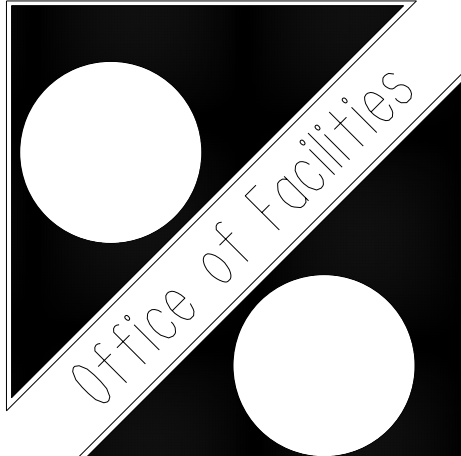
Drawn
DRB

Location
ICVA HEALTH CARE SYSTEM

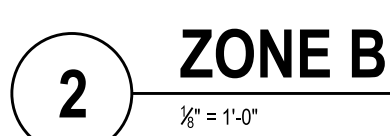
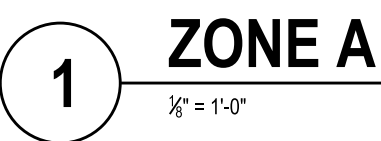
Date
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Project No.
636-201

DRAWING NO.
1-P8



Department of
Veterans Affairs

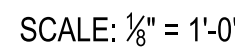


A. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.

B. ALL PIPING THROUGH FLOORS TO HAVE CORE DRILLED PENETRATIONS AND PROVIDED WITH FIRE STOPPING SLEEVES.

C. REFER TO SHEET 1-A8 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.

- 1 CONNECT TO EXISTING HW CIRCULATION MAIN AND EXTEND TO NEW SINK ABOVE CEILING.
- 2 CONNECT FAN COIL UNIT TO EXISTING CONDENSATE LINE. 3/4" PIPE OR AS RECOMMEND BY FAN COIL MANUFACTURER

VA FORM 08-623, FEB. 1983

Heery International Inc.
125 South Dubuque Street,
Suite 500,
Iowa City, IA 52240-4003
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Drawing Title

**PLUMBING PLAN-
LEVEL 3**

Location	ICVA HEALTH CARE SYSTEM
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1-P9



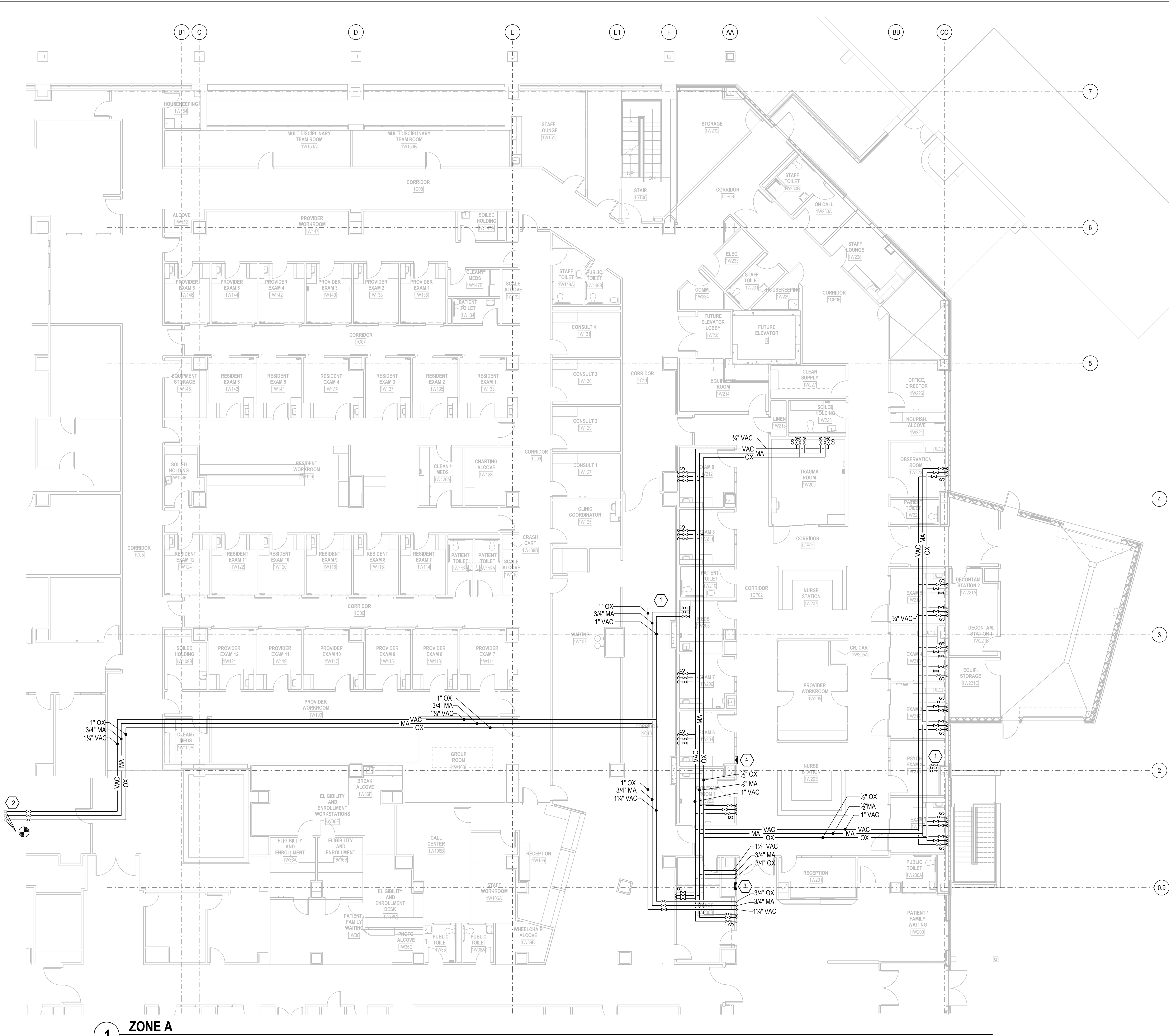
**Department of
Veterans Affairs**

GENERAL PLUMBING NOTES:

- A. INSTALL LOCKABLE SHUT-OFF VALVE IN THE CEILING PRIOR TO EACH WALL MEDICAL OUTLET. OWNER WILL PROVIDE THE LOCKING MECHANISM.
- B. REFER TO SHEET 1-A8 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.
- C. COORDINATE WITH ARCHITECTURAL DETAILS FOR EXACT LOCATIONS OF WALL OUTLETS.
- D. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER. PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
- E. ALL OUTLET AND SLIDES TO MATCH THOSE USED THROUGH OUT EXISTING FACILITY. CONTRACTOR TO VERIFY WITH VA PROJECT ENGINEER EXACT MODELS TO PROVIDE AND INSTALL.
- F. ALL PIPING THROUGH FLOORS TO HAVE CORE DRILLED PENETRATIONS AND PROVIDED WITH FIRE STOPPING SLEEVES.
- G. ALL CEILING MOUNTED ITEMS BETWEEN GRIDLINES "2" AND "5", AND FROM "CC" TO 32 FT EAST OF "CC", SHALL BE RIGIDLY SUPPORTED TO MINIMIZE MOTION DURING FUTURE MRI OPERATION. HANGERS SHALL BE FABRICATED FROM MATERIALS SUCH AS UNISTRUT. HANGERS SHALL BE BRACED TO PREVENT RACKING. FERROUS DUCT AND PIPE SHALL BE RIGIDLY FASTENED TO HANGER FRAME AND THERMALLY BROKEN. NON-FERROUS DUCT, PIPE, AND HANGERS MAY BE USED INSTEAD OF RIGID SUPPORTS. FERROUS LOOSE HANGER SYSTEMS SUCH AS HANGER STRAP AND ALL-THREAD ROD ARE PROHIBITED.

KEYED PLUMBING NOTES:

- 1 VALVE AND CAP FOR FUTURE CONNECTIONS.
- 2 CONNECT TO EXISTING RISER PIPE MAINS WITH NEW LOCKABLE SHUT-OFF VALVES. SHUT-DOWN SHALL BE COORDINATED WITH THE OWNER AND THE PRESENT EMERGENCY DEPARTMENT ACTIVITY. SHUT-DOWN SHALL BE AS SHORT AS POSSIBLE AND RE-CERTIFICATION PERFORMED AT THE END OF THE TIE-INS AND VALVE PLACEMENT.
- 3 MEDICAL GAS VALVE BOX.
- 4 MEDICAL GAS ALARM PANEL. COORDINATE WITH ARCHITECTURAL PLANS AND OWNER FOR EXACT LOCATION AND HEIGHT IN RELATION TO OTHER WALL MOUNTED EQUIPMENT.



1 ZONE A
1/8"=1'-0"

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project number
11-25503

Drawing Title
**MEDICAL GAS PLAN-
LEVEL 1**

CONSTRUCTION DOCUMENTS

Project Title
**EXPAND BLDG. 1 FOR PACT
AMBULATORY CARE & RADIOLOGY**

Building No.
BLDG. 1

Location
ICVA HEALTH CARE SYSTEM

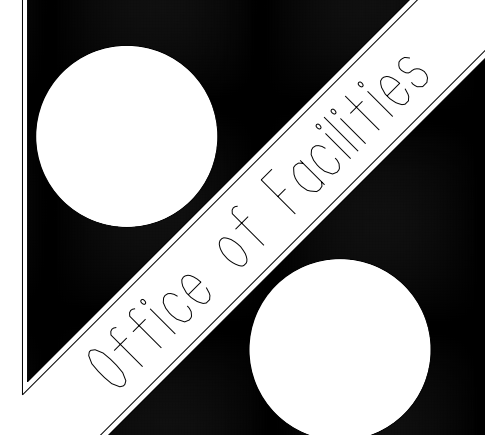
Date
12/15/2014

Project No.
636-201

DRAWING NO.
1-P10

Checked
AGW

Drawn
DRB

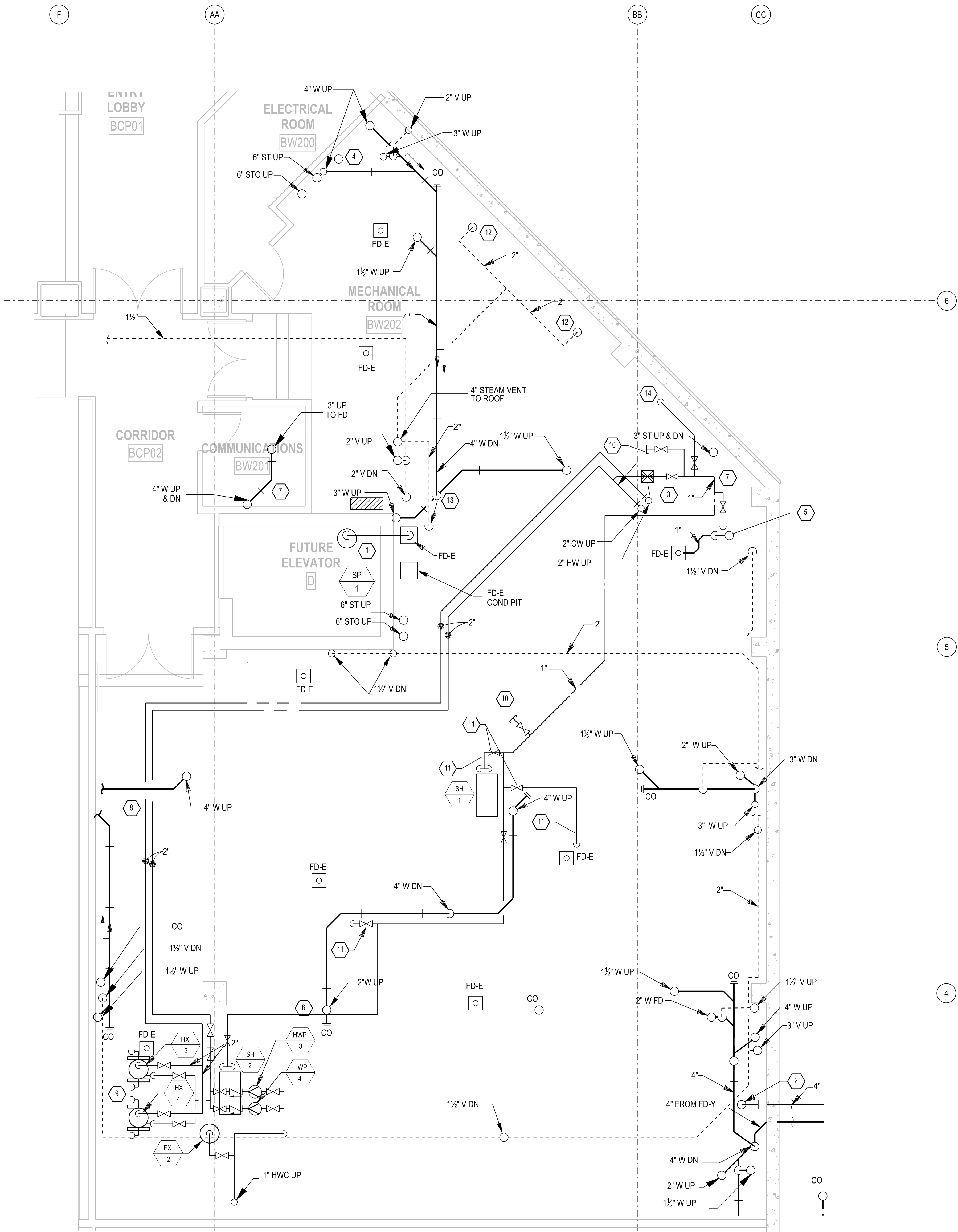


GENERAL PLUMBING NOTES:

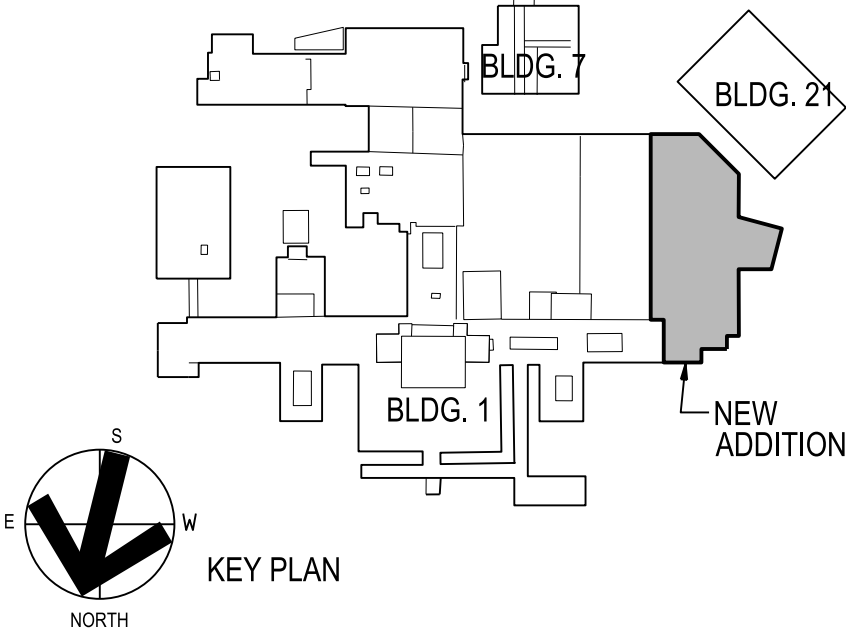
- A. INSTALL CLEANOUTS AT BASE OF ALL VERTICAL RISERS NEAR FLOOR FOR SANITARY AND STORM SEWER SYSTEMS.
- B. ALL WORK WITHIN EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER, PROPER DUST AND DIRT BARRIERS SHALL BE CONSTRUCTED FOR SEPARATION WITH THE WORK AREA IN THE HOSPITAL. SEPARATION PARTITIONS SHALL BE MADE OF STUDS AND GYPSUM BOARD, TAPED, AND CAULKED. PARTITION SHALL INCLUDE A DOOR. INFECTION CONTROL SHALL BE CLASS III.
- C. GENERAL CONTRACTOR TO SLOPE FLOORS TO WARDS FLOOR DRAINS. COORDINATE WITH ARCHITECT AND OWNER FOR APPROVED SLOPE REQUIRED.
- D. ALL SANITARY WASTE PIPE SHALL BE INSTALL AT 1/4" PER FOOT FALL.
- E. ALL PIPING THROUGH FLOORS TO HAVE CORE DRILLED PENETRATIONS AND PROVIDED WITH FIRE STOPPING SLEEVES.
- F. REFER TO SHEET 1-A8 FOR LIST OF AREAS AFFECTED BY DEDUCT ALTERNATES.

KEYED PLUMBING NOTES:

- 1 SP-1 DISCHARGE DOWN TO FLOOR SINK.
- 2 CONNECT DECONTAMINATION WASTE TO SANITARY MAIN.
- 3 1" CW SUPPLY WITH PRZ AND HOSE CONNECTION. TO BE USED FOR MECHANICAL SYSTEM FILLING. POT FEEDER AND HUMIDITY GENERATORS.
- 4 CONNECT 2" SUMP PUMP DISCHARGE (PD) TP 6" TO RISER ABOVE RISER CLEAN OUT.
- 5 PROVIDE 1 INCH CONDENSATE DRAIN WITH P-TRAP AT BOTTOM OUTSIDE AIR DUCT RISER WITH TRAP PRIMER.
- 6 SEE DETAIL ON 1-P12 FOR WATER HEATER HEAT EXCHANGER CONNECTION REQUIREMENTS.
- 7 SHEETMETAL TROUGH BELOW PIPING. PROVIDE WITH 1/2" DRAIN PIPE AND ROUTE TO NEAREST FLOOR DRAIN.
- 8 SHEETMETAL TROUGH BELOW PIPING THAT ROUTES ABOVE ELECTRICAL AND CONTROLS GEAR.
- 9 REFER TO SHEET 1-M19 FOR UTILITY PIPING. COORDINATE REQUIRED HEIGHT OF HOUSEKEEPING PAD WITH LPR PIPE SLOPE REQUIREMENTS.
- 10 SERVICE VALVE WITH HOSE CONNECTION.
- 11 INSTALL 1/2" CW SUPPLY WITH BALL VALVE TO CONDENSATE DRAIN COOLED DEVICES FOR HUMIDIFIER STEAM GENERATORS (SH-1, SH-2), AND HUMIDIFIER DISPERSION COILS FOR SHC-1, SHC-2.
- 12 STEAM PRESSURE REDUCING STATION VENT PIPING. INSULATE PIPE. INSTALL AS INDEPENDENT VENT SYSTEM FOR MECHANICAL VENTING.
- 13 STEAM CONDENSATE PUMP VENT PIPING. INSULATE PIPE. CONNECT TO STEAM PRESSURE REDUCING STATION VENT SYSTEM.
- 14 1/2" CW TO POT FEEDER.



1 ENLARGED PLUMBING PLAN LOWER LEVEL
1/4"=1'-0"



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project number
11-25503

Drawing Title
**ENLARGED PLUMBING PLAN
LOWER LEVEL MECH ROOM**

CONSTRUCTION DOCUMENTS

Project Title
**EXPAND BLDG. 1 FOR PACT
AMBULATORY CARE & RADIOLOGY**

Building No.
BLDG 1

Checked
AGW

Drawn
RAH

Location
ICVA HEALTH CARE SYSTEM

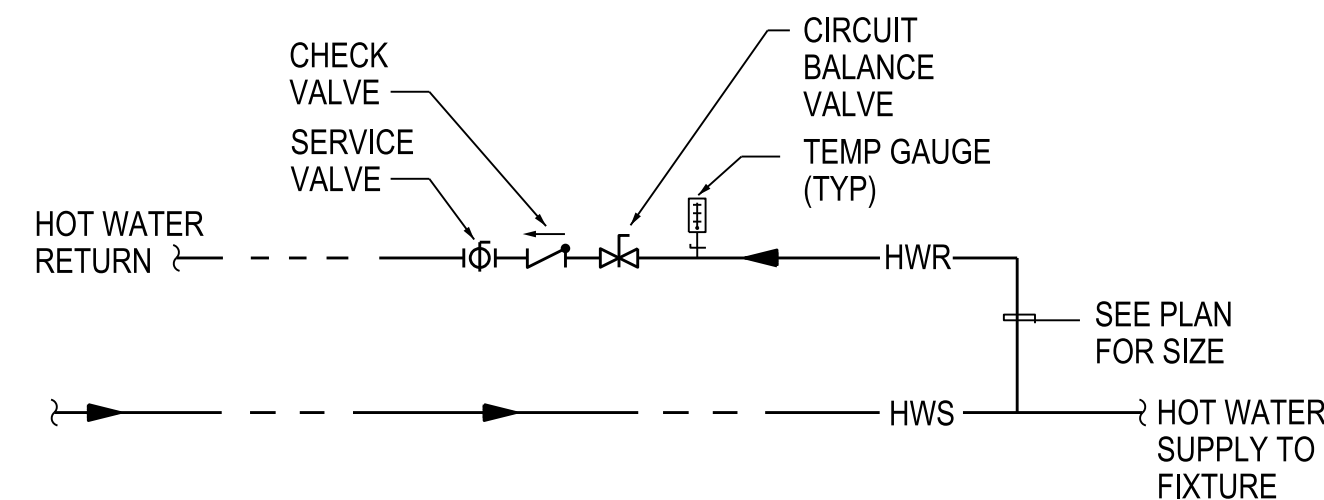
Date
12/15/2014

Project No.
636-201

DRAWING NO.
1-P11

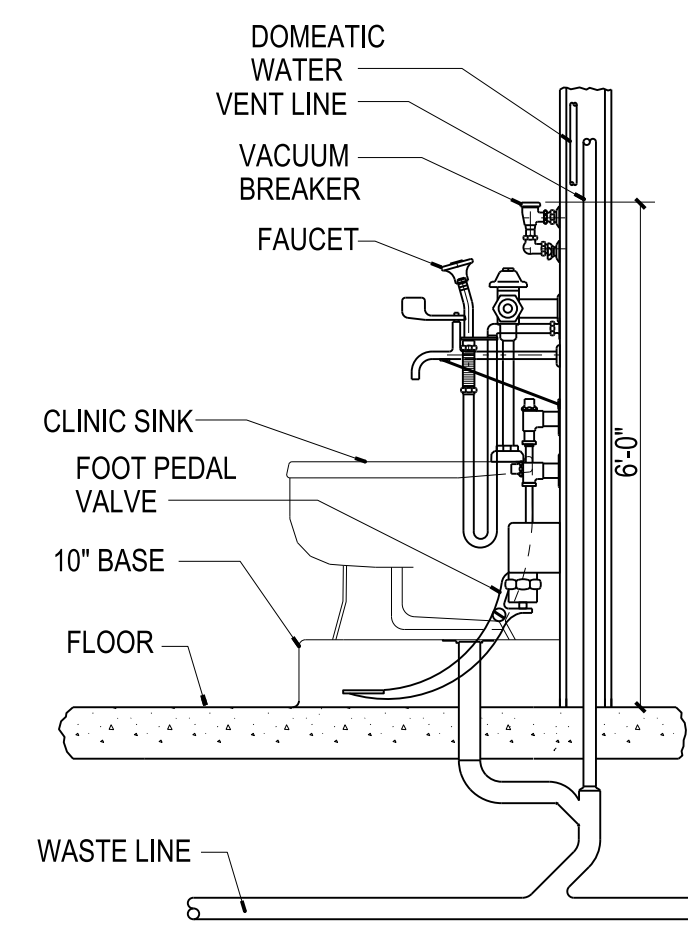


Department of
Veterans Affairs

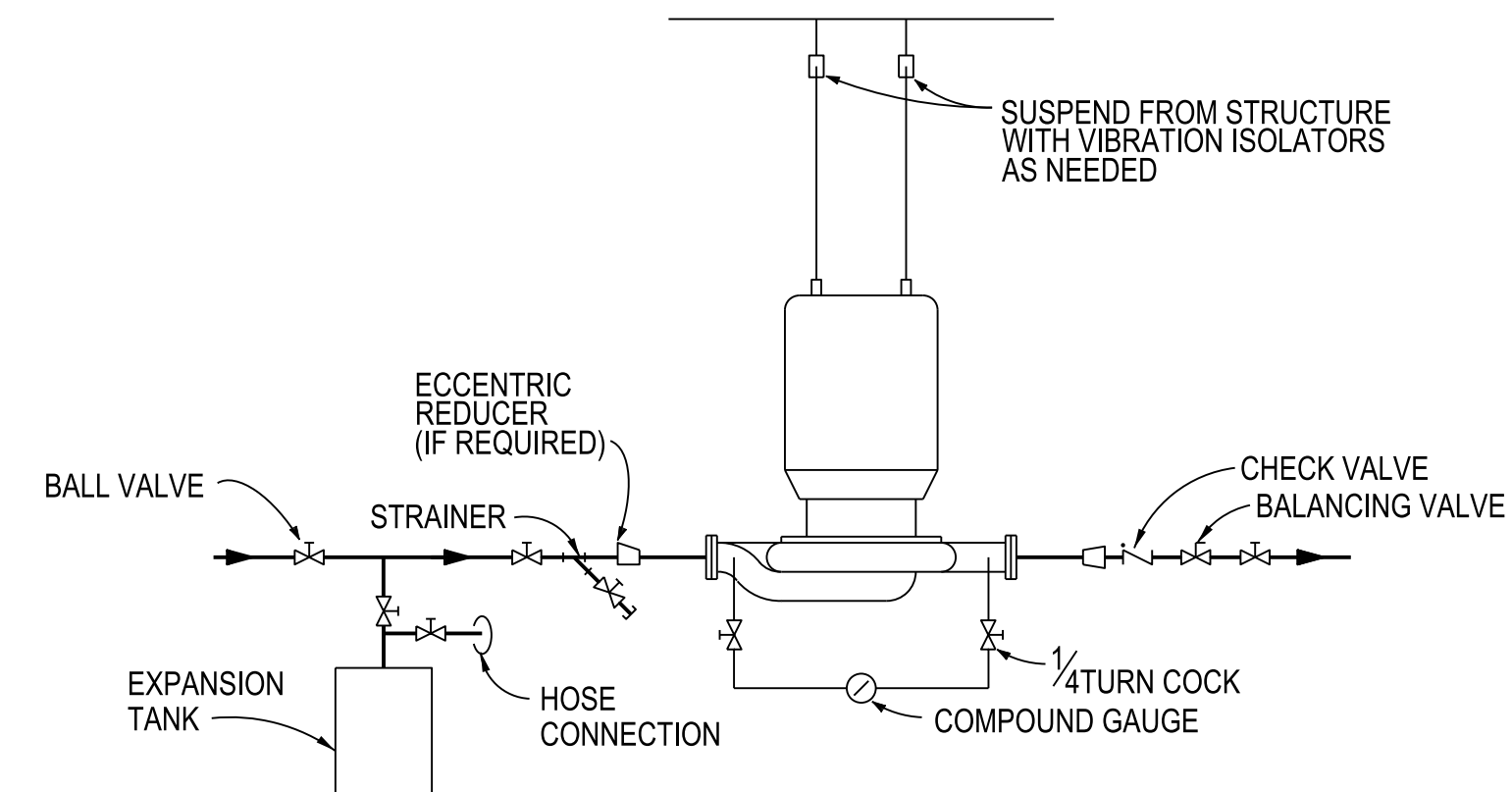


1 SUMP PUMP DETAIL
NO SCALE

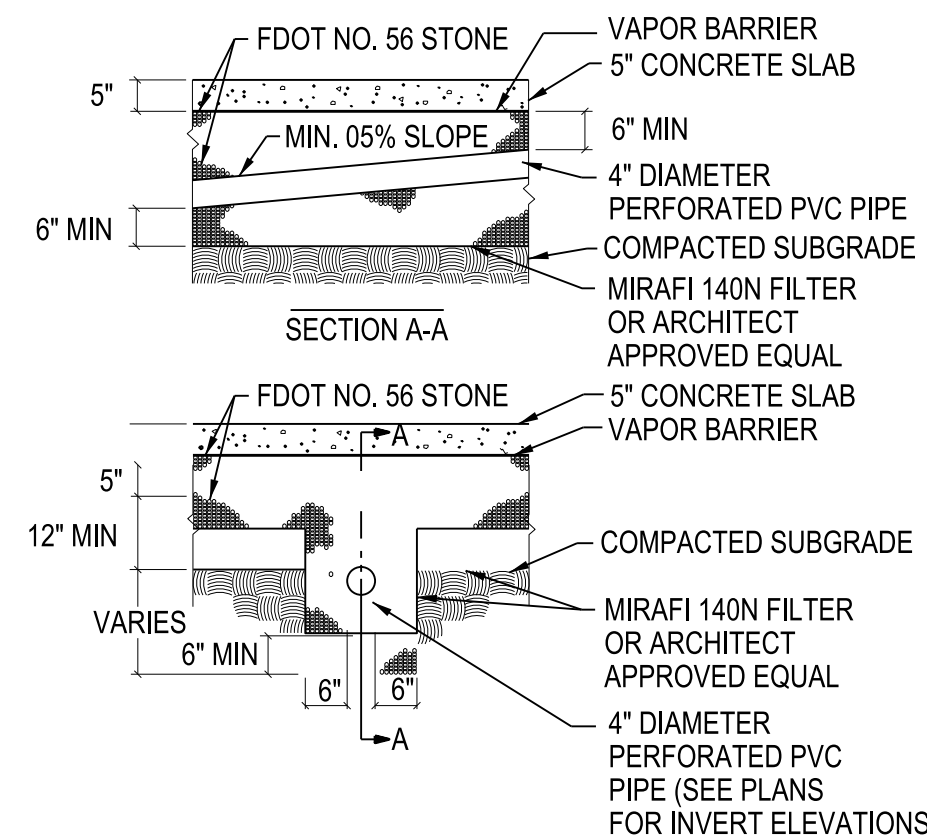
2 HOT WATER RECIRCULATION DETAIL



4 CLINIC SINK DETAIL

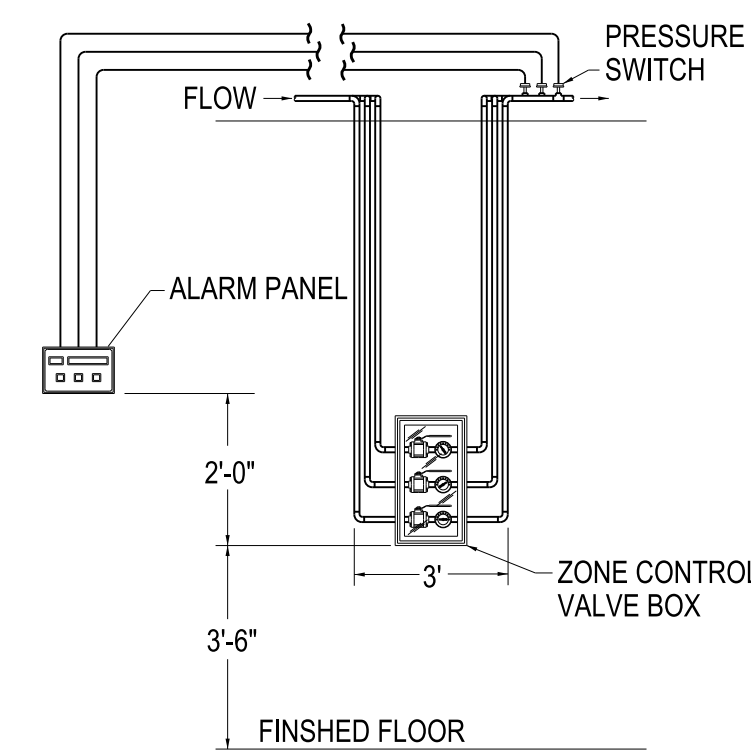


5 **INLINE PUMP, EXPANSION TANK DETAIL**
NO SCALE

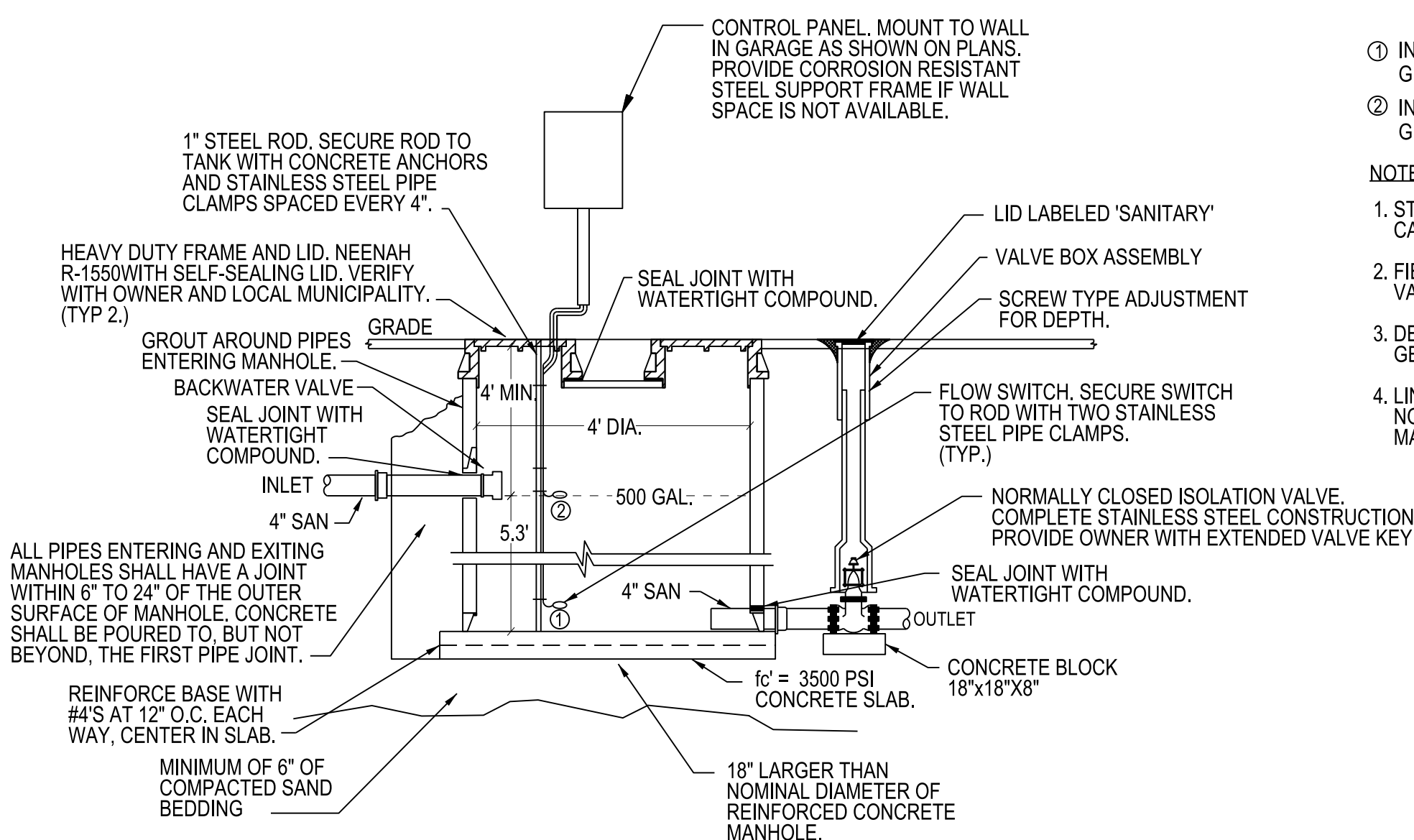


6 STORM PIPE DETAIL

7 UNDERSLAB DRAIN DETAIL



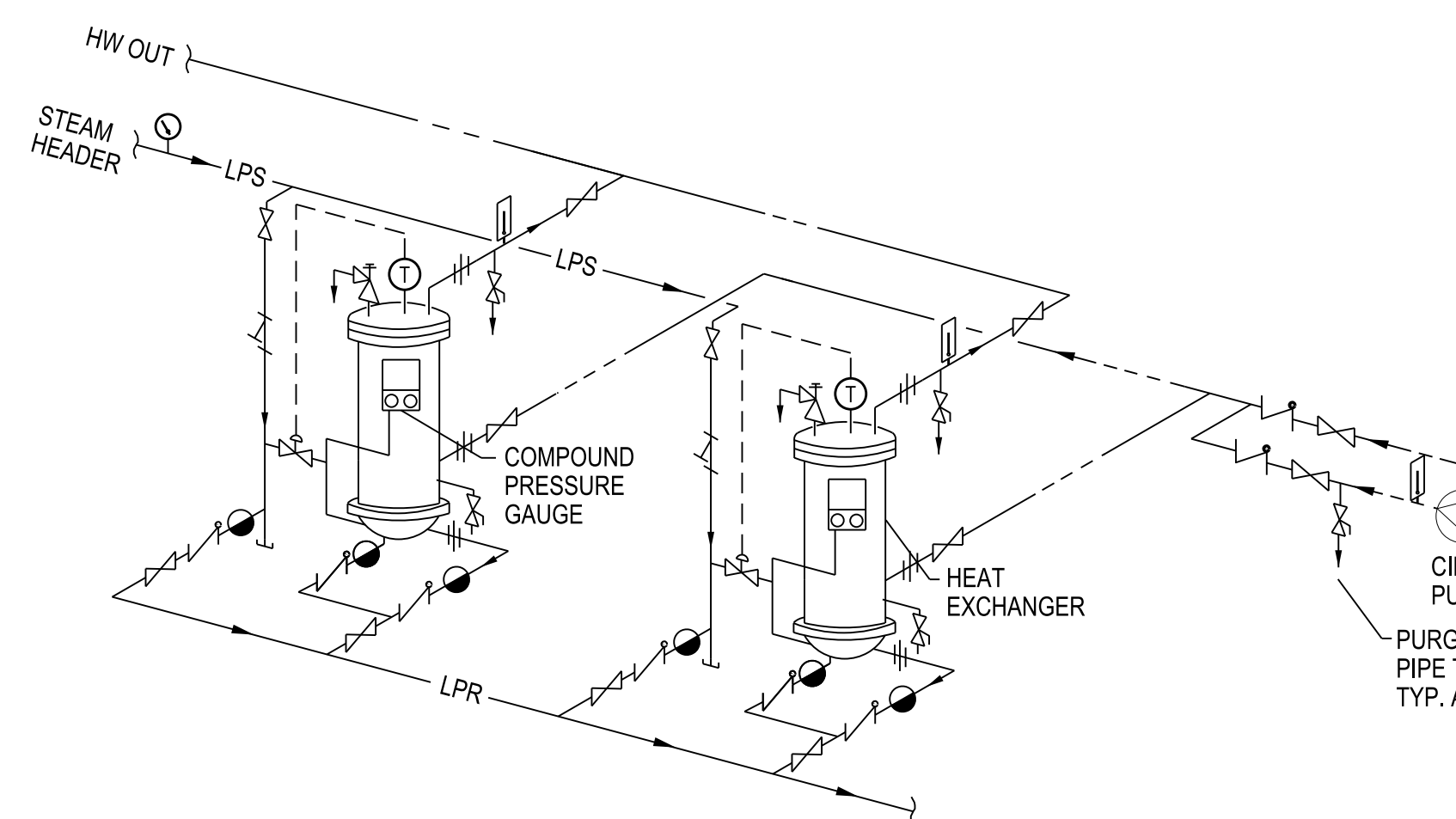
8 MEDICAL GAS VALVE BOX AND ALARM DETAIL



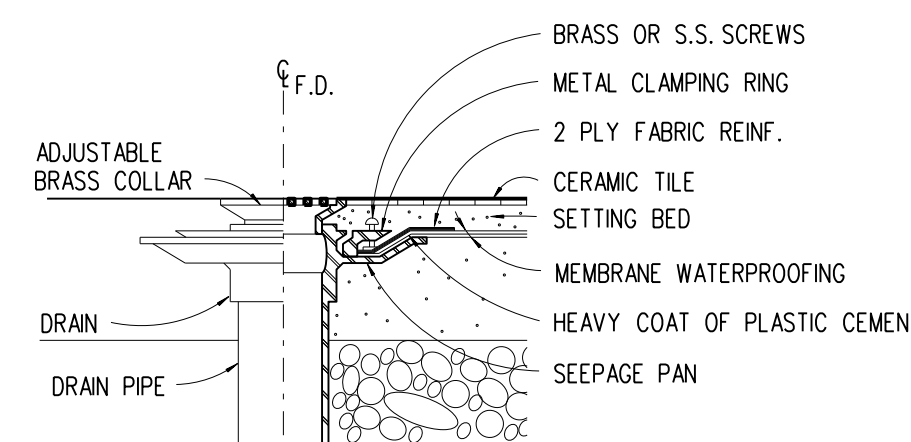
9 DECONTAMINATION STORAGE TANK
NO SCALE

- ① INSTALL FLOW SWITCH AT 250 GALLON LEVEL. A.T.C. TO PROVIDE GENERAL ALARM FOR DDC.
- ② INSTALL FLOW SWITCH AT 500 GALLON LEVEL. A.T.C. TO PROVIDE GENERAL ALARM FOR DDC.

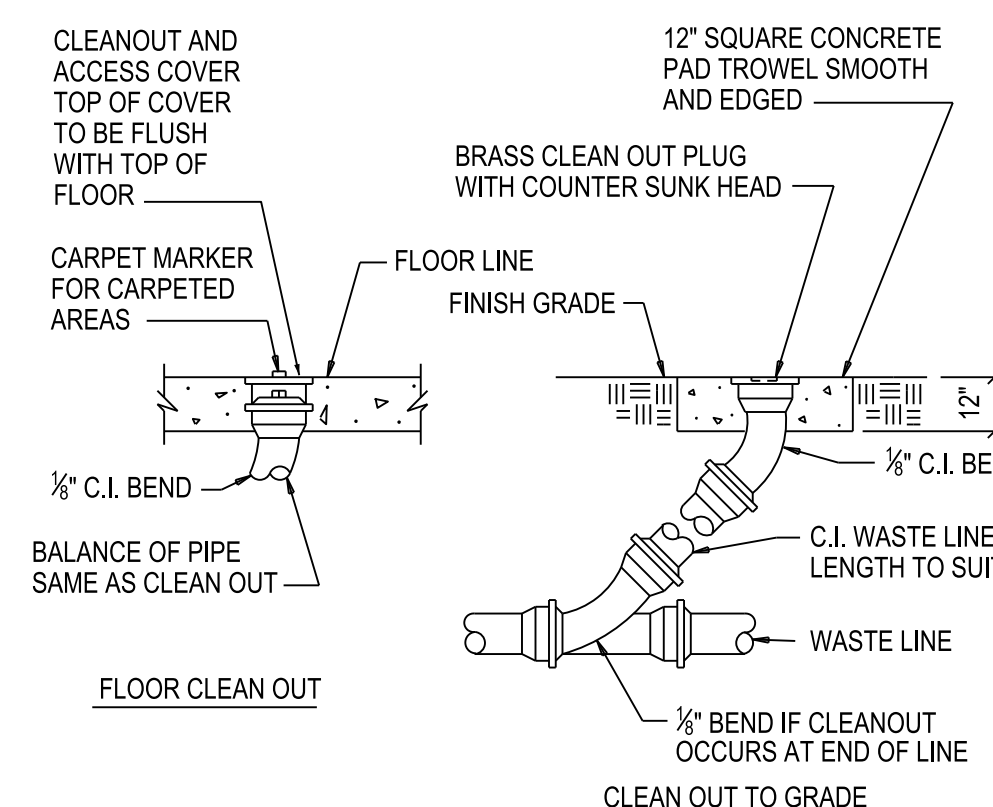
- NOTES:**
1. STORAGE TANK SHALL HAVE A MINIMUM STORAGE CAPACITY OF 500 GALLONS.
 2. FIELD VERIFY INVERT ELEVATIONS. DIMENSIONS MAY VARY TO ACCOMMODATE SITE.
 3. DECONTAMINATION TANK AND BACK FILL PROVIDED BY GENERAL CONTRACTOR.
 4. LINE AND SEAL TANK WITH CHEMICAL RESISTANT NON-PERMEABLE "XR-5-8138 GRADE GEOMEMBRANE MADE BY SEAMAN CORPORATION". NO SUBSTITUTIONS.



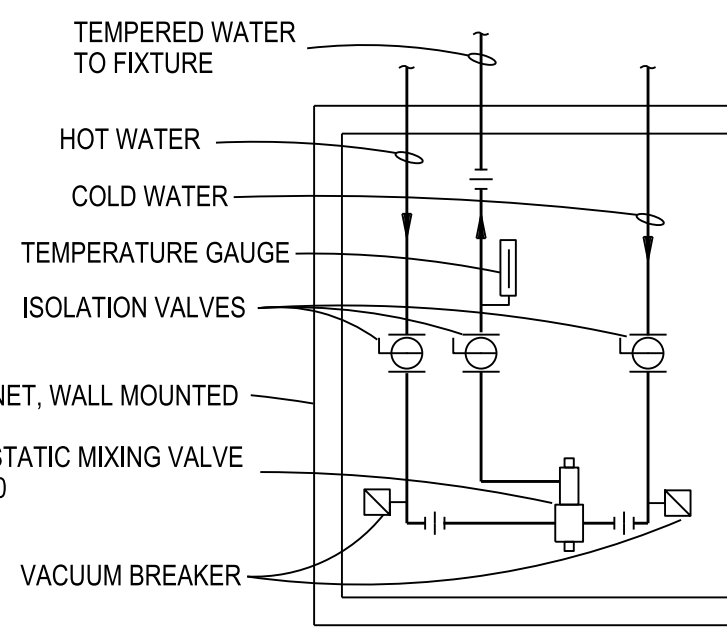
- NOTES:
1. FOR ACTUAL SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE HEATER, SEE DIMENSIONAL DRAWING BY MANUFACTURER.
 2. PIPING TO THE UPPER HEATER HEAD SHOULD BE PROVIDED WITH UNIONS OR FLANGES WHICH ARE LOCATED BEYOND THE OUTSIDE DIAMETER OF THE HEAD TO PERMIT REMOVAL OF THE HEAD AND SHELL.
 3. HEADERS SHOULD BE PIPED REVERSE RETURN OR BALANCING DEVICES ON THE OUTLETS SHOULD BE EMPLOYED.
 4. REDUCERS, ON THE WATER RULET SIDE, SHOULD BE LOCATED ADJACENT TO THE HEATER. EXPANSION FITTINGS, ON THE WATER RULET SIDE, SHOULD BE ARRANGED TO PERMIT THE CONDENSATE TO DRAIN FREELY, BY GRAVITY, FROM THE LOWER HEATER HEAD.
 5. CONDENSATE RETURN PIPING SHOULD BE ARRANGED TO PERMIT THE CONDENSATE TO DRAIN FREELY, BY GRAVITY FROM THE LOWER HEATER HEAD.
 6. DRAIN PIPING SHOULD BE PIPED TO A FLOOR DRAIN, RELIEF VALVE & OVER-TEMP SOLENOID VALVE SHOULD BE PIPED VERTICALLY TO A HEIGHT 19" ABOVE THE FLOOR.
 7. MINIMUM HOSE RECIRCULATION FOR EACH HEATER: SWD24-2, 10 GPM.



11 FLOOR DRAIN DETAILS



12 CLEAN OUT DETAILS



- MINIMIZE COLD AND HOT WATER FIXTURE RUN OUT DISTANCES BY LOCATING PIPING MAINS AS CLOSE TO FIXTURES AS POSSIBLE.

- CONTRACTOR TO PROVIDE AND INSTALL 304 STAINLESS STEEL WALL BOX, FLUSH MOUNTED, LOCKABLE, 12x12 MINIMUM. COORDINATE WITH CASEWORK AND OTHER TRADES FOR EXACT LOCATION. ASSEMBLY MAY BE EXPOSED BELOW SINK IF ENCLOSED BY CASEWORK.

13 THERMOSTATIC MIXING VALVE DETAIL

[illegible]

- NOTES:
1. ASME RATED.
 2. PROVIDE AIR CHARGING VALVE, HEAVY DUTY BUTYL BLADDER, AND CARBON STEEL CONSTRUCTION
 3. FIELD ADJUST CHARGE PRESSURE AS REQUIRED.

[illegible]

- NOTES:
1. INSTALL CHECK VALVE ON PUMP DISCHARGE.
 2. UNIT SHALL BE A SIMPLEX SUBMERSIBLE UNIT.
 3. ELECTRICAL CONNECTIONS SHALL BE SUBMERSIBLE.
 4. PROVIDE WITH FLOAT SWITCH AND HIGH LEVEL ALARM HORN ON PANEL
 5. PROVIDE WITH ISOLATED CONTACT FOR HIGH WATER ALARM TO BAS.
 6. MOUNT PUMP ON ELEVATED 4 INCH CONCRETE BLOCK.

Revisions	Date	Revisions	Date	Revisions	Date

